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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,418	01/20/2004	Harry J. Chmielewski	53394.000740	7764
21967 7590 03/29/2007 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109			EXAMINER ANDERSON, CATHARINE L	
			ART UNIT 3761	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,418	<b>Applicant(s)</b> CHMIELEWSKI ET AL.	
	<b>Examiner</b> C. Lynne Anderson	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 8 January 2007 have been fully considered but they are not persuasive.

In response to the applicant's argument that Huntoon fails to disclose surface crosslinking, it is noted that the polymer particles of Huntoon are crosslinked, which connects the polymer particles across their surfaces, and therefore the polymer particles of Huntoon are surface crosslinked.

In response to the applicant's argument that Huntoon fails to disclose FVAUL values, it is noted that the applicant does not point out what differences between the claimed invention and the prior art result in different FVAUL values. Huntoon discloses the fibers and polymers disclosed in the instant claims, and the absorbent composition of Huntoon will perform as claimed.

In response to the applicant's argument that Huntoon fails to disclose the polymer being in a continuous phase, it is noted that the instant specification does not provide a clear definition for the term 'continuous phase,' but merely gives a general description of the term. Therefore, since the polymer of Huntoon is provided substantially across the entire absorbent core, as shown in figure 1, the polymer of Huntoon is considered to comprise a continuous phase.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntoon et al. (6,046,377) in view of Widlund (5,919,178).

With respect to claims 1, 4-7, 12-15, and 17, Huntoon discloses all aspects of the claimed invention except the method of calendaring the surface crosslinked polymer between layers of wettable fibers. Huntoon discloses an absorbent article 11, as shown in figure 1, comprising a topsheet 14, a backsheet 12, and an absorbent core 16. The absorbent core 16 comprises 25% to 90% by weight surface crosslinked polymers, as disclosed in column 4, lines 59-61, which are crosslinked, as disclosed in column 4, lines 20-21. The surface crosslinked polymer comprises polyacrylic acid, as disclosed in column 4, line 12, and is provided evenly throughout the core, as shown in figure 1, and therefore comprises a continuous phase. The absorbent core further comprises 1% to 75% by weight wettable fibers, as disclosed in column 4, lines 65-66. Huntoon does not disclose performing the FVAUL test of the instant invention on the absorbent core 16, and therefore remains silent as to the FVAUL value. The absorbent core 16 of Huntoon is constructed of the same materials disclosed in the instant specification for the test method, wood pulp fiber and crosslinked superabsorbent, the absorbency is an inherent property, and the absorbent core 16 of Huntoon is expected to give a FVAUL value of at least 60 cc after 10 minutes, and a free volume of 20%-70%, if subjected to the tests disclosed in the instant specification.

Widlund teaches a method of producing an absorbent article comprising forming a first layer 2 of wettable fibers, distributing a layer of surface crosslinked polymers 3 on the first layer 2, providing a second layer 1 of wettable fibers, and calendaring the layers together, as shown in figure 1 and described in column 3, line 66, to column 4, line 4. The method of calendaring the superabsorbent polymer between first and second layers of wettable fibers prevents the superabsorbent polymer from leaking during manufacture and use of the article, as disclosed in column 2, lines 26-30.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to make the article of Huntoon by the method taught by Widlund to prevent superabsorbent polymer from leaking during use and manufacture of the absorbent article.

With respect to claim 2, polyacrylic acid is a bipolar molecule.

With respect to claim 3, Huntoon discloses in column 2, lines 25-32 that disbursing superabsorbent within a fibrous absorbent structure minimized gel-blocking.

With respect to claim 8, Huntoon discloses the use of both anionic superabsorbent polymers, such as polyacrylic acid, and cationic superabsorbent polymers, such as polyvinyl pyridines, as described in column 4, lines 7-16. Huntoon further discloses a mixture of polymers, as described in column 4, line 20. A mixture of anionic and cationic polymers would result in a mixed-bed ion-exchange polymer composition.

With respect to claims 9-11, the swelling of the polymer is a characteristic inherent to the polymer. Since Huntoon discloses a polymer having the same chemical

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structure as the claimed invention, the polymer of Huntoon will inherently exhibit the same swelling characteristics.

With respect to claim 16, the superabsorbent polymer is uniformly disbursed within the fibrous matrix, as described in column 9, lines 11-14.

With respect to claims 22-24, the wettable fibers comprise wood pulp, as disclosed in column 5, lines 56-62.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntoon et al. (6,046,377) in view of Widlund (5,919,178), and further in view of Beihoffer et al. (6,235,965).

Huntoon, as modified by Widlund, discloses all aspects of the claimed invention but remains silent as to the amount of crosslinking agent present, and the type of crosslinking agent used. Beihoffer discloses a crosslinked superabsorbent polymer of the type described by Huntoon. Beihoffer further discloses the crosslinking agent comprising 3% by weight of the superabsorbent, as described in column 12, lines 51-53, the crosslinking agent being a methyl bisacrylamide, as described in column 12, lines 57-65. It would therefore be obvious to one of ordinary skill in the art to crosslink the superabsorbent polymer of Huntoon with the crosslinking agent of Beihoffer.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntoon et al. (6,046,377) in view of Widlund (5,919,178), and further in view of Tanzer et al. (5,364,380).

Huntoon discloses all aspects of the claimed invention with the exception of a neutralizing agent. Tanzer discloses an absorbent article containing a neutralizing agent, as described in column 4, lines 64-68, to reduce odors. It would therefore be obvious to one of ordinary skill in the art at the time of invention to include the neutralizing agent of Tanzer in the absorbent article of Huntoon in order to reduce odors.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CWA

cla

March 26, 2007

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

